

AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended)

B1 A catalyst comprising palladium, at least one alkali metal compound and, optionally, at least one promoter on a porous support, obtained by loading the porous support, with at least one palladium compound which support comprises a reducible metal oxide of elements of groups IIIb, IVb, Vb, Vlb of the periodic Table of the Elements or ZnO or comprises a mixture of these oxides or a mixed oxide of these elements in which zinc may also be present, TiO_2 produced through the flame hydrolysis of TiCl_4 , with at least one palladium compound, subsequently carrying out reduction at a temperature of 300-600 500°C and additionally applying at least one alkali metal compound and, optionally, at least one promoter before or after the reduction.

Claim 2 (previously amended)

A catalyst of claim 1 which comprises at least one potassium compound.

Claim 3 (previously amended)

A catalyst of claim 1 which additionally comprises at least one member of the group consisting of Au, Ba, Cd and their compounds as promoter.

Claim 4 (currently cancelled)

Claim 5 (previously amended)

A catalyst of claim 1, wherein the reduction is carried out for 1 minute to 24 hours.

Claim 6 (previously amended)

A catalyst of claim 1, wherein the reduction is carried out using gaseous or vaporizable reducing agents.

Claim 7 (previously amended)

A catalyst of claim 1, wherein the reducing agent for the reduction is at least one member selected from the group consisting of H₂, CO, ethylene, NH₃, formaldehyde, methanol, hydrocarbons and mixtures of these reducing agents with inert gases.

Claim 8 (currently amended)

B2 A process for producing a catalyst of claim 1, comprising loading the porous support with at least one palladium compound, which support comprises a TiO₂ produced through the flame hydrolysis of TiCl₄, ~~reducible metal oxide of elements of groups IIb, IVb, V, VIb of the Periodic Table of the Elements or ZnO or comprises a mixture of these oxides or a mixed oxide of these elements in which zinc may also be present, with at least one palladium compound~~, subsequently carrying out reduction at a temperature of 300-500 600°C and additionally applying at least one alkali metal compound and, optionally, at least one promoter before or after the reduction.

Claim 9 (previously amended)

The process of claim 8, wherein the catalyst comprises at least one potassium comopund.

Claim 10 (previously amended)

The process of claim 8, wherein the catalyst additionally comprises at least one member of the group consisting of Au, Ba, Cd and their compounds as promoters.

Claim 11 (currently cancelled) /

Claim 12 (previously amended)

The process of claim 8, wherein the reduction is carried out from 1 minute to 24 hours.

Claim 13 (previously amended)

The process of claim 8, wherein the reduction is carried out using gaseous or vaporizable reducing agents.

Claim 14 (previously amended)

The process of claim 8, wherein the reducing agent for the reduction is at least one member selected from the group consisting of H_2 , CO, ethylene, NH_3 , formaldehyde, methanol, hydrocarbons and mixtures of these reducing agents with inert gases.

Claim 15 (previously cancelled)

Claim 16 (previously added)

In a process for the preparation of vinyl acetate from the gaseous phase reaction of ethylene, acetic acid and oxygen or oxygen containing gas, the improvement comprising using as catalyst the catalyst of claim 1.